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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,063	02/25/2004	Tomohisa Higuchi	249256US6X	8923

22850 7590 10/30/2006

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EXAMINER

WALTER, CRAIG E

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/785,063	Applicant(s) HIGUCHI, TOMOHISA	
	Examiner Craig E. Walter	Art Unit 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-19 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-19 are pending in the Application.
Claims 1-6, 9-15 and 17-19 have been amended.
Claims 1-3 and 5-19 are rejected.
Claim 4 is objected to.

Response to Amendment

2. Applicant's amendments and arguments filed on 5 July 2006 in response to the office action mailed on 4 April 2006 have been fully considered, but they are not persuasive. Therefore, the rejections made in the previous office action are maintained, and restated below, with changes as needed to address the amendments.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 8-12, 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi (US Patent 5, 378,887).

As for claims 1 and 9-11 Kobayashi teaches an information processing apparatus (method, medium and program) including an information recording medium, comprising:

communicating means for communicating data with said information recording medium (referring to Fig. 5, elements 32, 34 and 36 (and the data transfer paths associated with these three units) comprise the communication means; the memory can be written to, or read from via the memory control section, or the memory may be accessed (i.e. read) by the memory control section via the read area deciding section) – col. 7, line 62 through col. 8, line 11;

detecting means for detecting access to said information recording medium (Fig. 5, element 36 – the memory control section controls access to and from the memory, therefore it is capable of detecting when the memory is being accessed – col. 7, line 63 through col. 8, line 11);

determining means for determining whether a result of detection by said detecting means indicates internal access by said communicating means or external access from an external apparatus (access can occur from a write operation via the external device (referring to Fig. 5, the external device communicates with the IC card via the non contact terminal (40), to the modulating and demodulating section (38), to the memory control section (36) – col. 7, line 63 through col. 8, line 17). Additionally, the access could be simply result from reading the memory via the read area deciding section - col. 7, line 63 through col. 8, line 11). Note the memory control section is capable of making a determination of where the access is coming from – more specifically, the read area deciding section is used to decide which area of the memory 32 should be accessed. In order for the system to function properly, the read area deciding

section must compare the numbers recorded in each respective area in of the memory (either 321 or 322), and make a determination based on this information which area should be selected. This information is then sent to the memory control section - col. 8, lines 63 through col. 9, line 7. Kobayashi clearly sets forth the read area deciding section as accessing the memory sections to make this determination (to compare the numbers read from each respective section), therefore he does teach an "internal access" (i.e. accessing includes both writing to, and *reading from*, a memory). Kobayashi's memory control section clearly can determine if the memory access occurs from the external apparatus (the thrust of the invention is directed to preventing and allowing re-access from the external source), and clearly it can determine the occurrence of an internal access (i.e. the data coming from the read area deciding section is a result of internal access once it receives the critical information on the memory areas); and

access controlling means for controlling the external access from said external apparatus when said determining means determines that the result of detection by said detecting means indicates the external access from said external apparatus (col. 2, line 64 through col. 3, line 11 – the system will generate an inhibition signal to control access to the memory via the external device for a predetermined time. The control means can decide weather or not to permit access from the external device to the main circuit based on frequencies of access, by uses the information provided by the inhibition signal) -

the memory control section can clearly control access to the memory from the external apparatus via the re-access circuitry, Kobayashi clearly teaches controlling the external access when it is determined that the access has occurred from the external apparatus (i.e. access cannot be controlled unless the external apparatus is first determined be accessing the memory). Additionally note, Kobayashi's system does not allow for the data read out of the memory areas to be written back to the memory (rather it is used as metadata to help control the data from the external apparatus), hence Kobayashi is controlling access from the external apparatus via the aid of the data which was accessed internally).

As for claims 12 and 17-19, Kobayashi teaches an information processing apparatus (method, medium and program) including an information recording medium, comprising:

communicating means for communicating data with said information recording medium (referring to Fig. 5, elements 32, 34 and 36 (and the data transfer paths associated with these three units) comprise the communication means; the memory can be written to, or read from via the memory control section, or the memory may be accessed (i.e. read) by the memory control section via the read area deciding section) – col. 7, line 62 through col. 8, line 11;

detecting means for detecting access to said information recording medium (Fig. 5, element 36 – the memory control section controls access to and

from the memory, therefore it is capable of detecting when the memory is being accessed – col. 7, line 63 through col. 8, line 11);

determining means for determining whether a result of detection by said detecting means indicates internal access by said communicating means or external access from an external apparatus (access can occur from a write operation via the external device (referring to Fig. 5, the external device communicates with the IC card via the non contact terminal (40), to the modulating and demodulating section (38), to the memory control section (36) – col. 7, line 63 through col. 8, line 17). Additionally, the access could be simply result from reading the memory via the read area deciding section - col. 7, line 63 through col. 8, line 11). Note the memory control section is capable of making a determination of where the access is coming from; and

informing means for, when said determining means determines that the result of detection by said detecting means indicates the external access from said external apparatus, notifying a user of the external access (once the circuit completes operation based on the access from the external device, an operation inhibition signal is generated to notify the system that a recent access has occurred, and the no additional access is to occur until the predetermined time elapses – col. 2, line 64 through col. 3, line 11).

Please refer to claim 1 for further explanation of Kobayshi's teachings with respect to these claim limitations.

As for claim 5, Kobayashi teaches informing means for, when said determining means determines that the result of detection by said detecting means indicates the external access from said external apparatus, notifying the user of the external access (once the circuit completes operation based on the access from the external device, an operation inhibition signal is generated to notify the system that a recent access has occurred, and the no additional access is to occur until the predetermined time elapses – col. 2, line 64 through col. 3, line 11).

As for claims 8 and 16, Kobayashi teaches the information recording medium as being a non contact type IC (Kobayashi's invention is directed towards controlling a non contact type IC card (see abstract)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US Patent 5, 378,887) as applied to claims 1 and 9 above, and in further view of Masaki et al. (US PG Publication 2002/0188852 A1), hereinafter Masaki.

As for claims 2 and 15, though Kobayashi teaches detecting access to his information processing apparatus, he fails to teach recording the internal or external access information as history information on a recording medium.

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Masaki however teaches an illegal access monitoring device for an IC card, which is used to monitor access to the IC card (paragraph 0037, all lines). Note Masaki specifically refers to storing access information in the IC card (paragraph 0112, all lines).

As for claim 3, Kobayashi's system is designed such that the access controlling means refers to the inhibition signal, rather than stored access history information in order to control external access from the external device. Again Masaki teaches monitoring access to the card, and storing access information in said card, which may be referred to a later time to determine if access should be granted or denied based on the stored access information (see the rejection of claim 2 above).

It would have been obvious to one of ordinary skill in the art at the time of the invention for Kobayashi to further include Masaki's illegal access monitoring device for an IC card to his own non-contact IC card. By doing so, Kobayashi would benefit by increasing the security and integrity of data stored within the card by preventing unauthorized access to the memory, and further mitigating the threat of reverse engineering as taught by Masaki in paragraph 0036, all lines.

5. Claims 6-7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US Patent 5, 378,887) as applied to claims 1 and 9 above, and in further view of Hinker et al. (US Patent 6,351,845 B1), hereinafter Hinker.

As for claims 6-7 and 13-14, though Kobayashi teaches notifying external access to the memory, he fails to teach notifying the user of the system via a warning display,

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sound, light, or vibration. He further fails to teach changing the informing method based on access source as claimed by Applicant.

Hinker however teaches an apparatus for analyzing memory use in which the system visually notifies a user when particular types of memory access are occurring within the system (see abstract). More specifically, Hinker teaches the use of different colors to designate the specific type of memory access (i.e. red for a read operation, and green for a write operation) – col. 8, lines 33-35.

It would have been obvious to one of ordinary skill in the art at the time of the invention for Kobayashi to further include Hinker's apparatus for analyzing memory use to his own non-contact IC card. By doing so, Kobayashi would benefit by having a means of visually informing the user of his card as to how frequently the memory is being accessed, and which access type is taking place. This in turn will help the user understand data dependencies within the memory as taught by Hinker in col. 3, lines 4-9. This information, can in turn help a user to understand how the memory is being accessed, in order to help reduce the number of accesses, hence improving the memory's efficiency as taught by Hinker in col. 1, line 20-32.

Note that since Kobayashi's system uses the read area deciding section (Fig. 5, element 34) to read data from the memory, and utilizes a path from elements 40, 38, 36 (Fig. 5) to access the memory (32) from the external device, a read and write operation would come from a different source, just as claimed by Applicant.

Allowable Subject Matter

6. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Though Kobayashi in view of Masaki disclose all of the limitations of claim 3, they fail to further teach when the history information corresponding to said external apparatus is not retrieved, displaying a selection screen for allowing selection of permission or denial of the external access, wherein the recording means records the history information on a basis of an operation of the selection screen by a user as recited by Applicant in this claim.

Response to Arguments

8. Applicant's arguments with respect to claim 1-19 have been considered but they are not persuasive.

9. With respect to claim 1, Applicant asserts that the '887 (i.e. Kobayashi) patent fails to disclose the detecting means, the determining means, and the access controlling means as recited in this claim. More specifically, Applicant sets forth three main points of contention consistent with this allegation throughout the traversal.

First, Applicant asserts that is unclear from the previous Office action how the memory 32 can be both the recording medium, and part of the communication means

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as recited in this claim. Applicant states that the assumption will be made that the memory 32 was meant to equate to the recording medium set forth in this claim, which leads directly to the second point of contention.

Secondly, under the assumption *supra*, Applicant asserts that the '887 patent fails to disclose determining means for determining whether a result of detection by the detection means indicates internal access by the communication means or external access from an external apparatus. Applicant further contends that only the control section 36 accesses the memory, therefore it is unclear as to how the memory control section can determine whether it accessed the memory 32 or an external apparatus accessed the memory 32. Applicant contends that the memory control section merely indicates to the memory control section which area 321 or 322 to read or write from, therefore the read area deciding section does not access the memory 32. Applicant cites Fig. 5 to support this allegation, stating that the uni-directional arrow supports the contention that the reading area cannot access the memory. Examiner finds this argument to be not persuasive, with justification provided *infra*.

Lastly, Applicant contends that the '887 patent fails to disclose the access controlling means for controlling the external access when the determining means determines that the result of the detection by the detecting means indicates that the external access from the external apparatus. More specifically, Applicant states the '887 patent only discloses one type of access, it cannot control access based on either internal or external access. Applicant further contends that the cited circuit for setting the time for inhibition of re-access does not make a decision based whether the

determining means determines that the result of the detecting means indicates the external access from the external device.

Examiner finds this argument to be not persuasive, with justification provided *infra*.

With respect to Applicant's first argument, Examiner maintains that the previous Office action did in fact equate the memory 32 to Applicant's claimed recording medium, and that said action clearly established the communication means as consisting of the data transfer paths –see paragraph 006, lines 1-10 of the previous action. In this regard, Applicant's assumption that memory 32 equates to the recording medium is both correct, and consistent with Examiner's previous action.

With respect to Applicant's second argument, Examiner maintains that Kobayashi does in fact teach the detecting and determining means as recited in this claim. More specifically, the read area deciding section (hereinafter RADS) is used to decide which area of the memory 32 should be accessed. In order for the system to function properly, the RADS must compare the numbers recorded in each respective area in of the memory (either 321 or 322), and make a determination based on this information which area should be selected. This information is then sent to the memory control section - col. 8, lines 63 through col. 9, line 7. Kobayashi clearly sets forth the RADS as accessing the memory sections to make this determination (to compare the numbers read from each respective section), therefore he does teach an "internal access" (i.e. accessing includes both writing to, and *reading from*, a memory). Kobayashi's memory control section clearly can determine if the memory access occurs

from the external apparatus (the thrust of the invention is directed to preventing and allowing re-access from the external source), and clearly it can determine the occurrence of an internal access (i.e. the data coming from the RADS is a result of internal access once it receives the critical information on the memory areas), hence Kobayashi clearly teaches a "determining means for determining whether a result of detection by said detecting means indicates internal access by said communicating means or external access from an external apparatus" as recited in this claim. Absent determining if the external device is accessing the memory, Kobayashi's system would not function; therefore his teachings clearly anticipate this limitation.

With respect to Applicant's last argument, Examiner maintains that Kobayashi teaches the access controlling means for controlling the external access as recited by Applicant in this claim. More specifically, Examiner has clearly established that more than one type of access occurs within the system (i.e. the RADS can read each respective area of the memory 32, and the external apparatus can read from, and write to, the memory 32. Since the memory control section can clearly control access to the memory from the external apparatus via the re-access circuitry, Kobayashi clearly teaches controlling the external access when it is determined that the access has occurred from the external apparatus (i.e. access cannot be controlled unless the external apparatus is first determined be accessing the memory). Additionally note, Kobayashi's system does not allow for the data read out of the memory areas to be written back to the memory (rather it is used as metadata to help control the data from

the external apparatus), hence Kobayashi is controlling access from the external apparatus via the aid of the data which was accessed internally).

10. Applicant's argument that claims 5 and 8 are allowable for being dependant on claim 1 is rendered moot, as Examiner maintains that Kobayashi anticipates claim 1 per the arguments and rejections set forth *supra*.

11. Applicant's argument that claims 9-12 and 17-19 are allowable for the same reasons as claim 1 is rendered moot, as Examiner maintains that Kobayashi anticipates claim 1, (and claims 5, 8-12 and 16-19) per the arguments and rejections set forth *supra*.

12. Applicant's argument that any remaining claims are allowable since the '845 patent (Hinker), and the '852 application (Masaki) fail to cure the deficiencies of Kobayashi is rendered moot, as Examiner maintains that Kobayashi anticipates claims 1 5, 8-12 and 16-19 per the arguments and rejections set forth *supra*.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

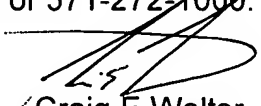
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig E. Walter whose telephone number is (571) 272-8154. The examiner can normally be reached on 8:30a - 5:00p M-F.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CEW


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